

What is claimed is:

1. An interconnection element for a multi-phase winding (11) that is comprised of coils (12) and belongs to an electric machine, in particular a brushless mini motor, having a support (20) made of insulating material and conducting strips that are disposed on the support (20) and are for producing interconnections among the coils (12) wherein the electrical conducting strips are embodied in the form of bent wires (27 – 30).

2. The interconnection element as recited in claim 1, wherein the wires (27 – 30) are contained in concentric channels (23 – 26), which are embodied in the support (20) and are offset from one another, partly in the radial direction, partly in the axial direction.

3. The interconnection element as recited in claim 2, wherein the wires (27 – 30) are fixed in the channels (23 – 26) by means of two annular cover elements (31, 32) made of insulating material, which are placed against the top and bottom of the support (20) and affixed to it.

4. The interconnection element as recited in claim 3, wherein the cover element (32) that is placed against the underside of the support (20) is provided with fastening means for spatially fixing it in the machine.

5. The interconnection element as recited in claim 3 or 4, wherein an upper channel (25) is covered by the upper cover element (31), a lower channel (26) is covered by the lower cover element (32), and the upper cover element (31) has closing bodies (33), which are offset from one another in the circumference direction, protrude axially downward, and rest on two radially offset middle channels (24, 25).

6. The interconnection element as recited in one of claims 1 through 5,
wherein in the course of the wires (27 – 30), bent segments (35) are provided,
which are for connecting the coil ends (121, 122) of the coils (12) of the winding
5 (11).

7. The interconnection element as recited in claim 6,
wherein the bent segments (35) are routed out of the channels (23 – 26), partly
by being routed over the channel rims and partly by being routed radially out
10 lateral channel openings (231, 261).

8. The interconnection element as recited in one of claims 1 through 7,
wherein the support (20) is provided with a terminal strip (36) that has connecting
terminals (37 – 39); one wire end of each of the wires (27 – 29) is attached to a
15 connecting terminal (37 – 39).

9. The interconnection element as recited in one of claims 2 through 8,
wherein the support (20) is embodied in the form of a circular plastic ring into
which the channels (23 – 26) are integrally formed.
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10. A stator for an electric machine, in particular for a brushless mini motor,
having a stator body (14) and a multi-phase winding (11) that is comprised of
coils (12) and is contained in this stator body,
characterized by means of an interconnection element (10) as recited in one of
25 claims 1 through 9 that connects the coils (12).

11. The stator as recited in claim 10,
wherein the interconnection element (10) is placed against one end surface of
the stator body (14) and the fastening means provided on the support (20) are
30 comprised of bracing struts (34) that are disposed offset from one another

around the circumference of the support (20) and rest radially against the inner wall of the stator body (14) with a frictional, nonpositive engagement.

12. The stator as recited in claim 10 or 11,

5 wherein the coil ends (121, 122) of the coils (12) are placed against connecting pins (17), which protrude axially from the end surface of the stator body (14), and the connecting pins (17) are attached to the bent segments (35) in the wires (27 – 30) of the interconnection element (10) in an electrically conductive manner, preferably by being welded or soldered to them.

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13. The stator as recited in one of claims 1 through 12,

wherein the coils (12) are embodied in the form of annular coils that are wound onto stator teeth (16), which protrude radially from a yoke ring (15) of the stator body (14).